

Merrimack Power Station Draft National Pollutant Discharge Elimination System (NPDES) Permit

In 2014, EPA and the New Hampshire Department of Environmental Services (NHDES) reconsidered and revised certain portions of the NPDES Permit they issued in 2011 for the Merrimack Station Power Plant in Bow. The changes included pollutants and effluent limits, as well as reporting requirements for Outfall 003A and Outfall 003C. EPA received comments on the changes in two stages. First, they accepted comments on the changes to the permit. Second, they accepted comments on remarks received in the first stage. All of those comments and the updated Fact Sheet are in the Merrimack Administrative Record on EPA's website. EPA is reviewing all the comments and preparing responses expected to be released in 2015. The 2011 Draft NPDES permit met the requirements of federal and state water pollution control laws. Conditions of the permit governed the facility's discharges of waste heat to the Merrimack River and its withdrawal of river water to cool the plant. It also governed the plant's discharges to the river of mercury, arsenic, selenium, and other elements. EPA and NHDES issued the original Merrimack NPDES permit in 1991.

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- Minimizing Water Discharge, Maximizing Re-Use – WaterWorld
- Bromide Injection Study for Mercury in FGD - URS Technical Paper
- Cooper Wastewater Treatment for Flue Gas Desulfurization (FGD) at Electric Power Plants
- BNA Article Regarding Steam Electric Guidelines, March 2014
- Flue Gas Desulfurization (FGD) Evaporator Operation Report, ENEL Brindisi

About Merrimack Power Station

Merrimack Station is a 470 megawatt, predominately coal-fired electric generation facility owned and operated by Eversource Energy (formerly Public Service of New Hampshire). The facility takes up to 287 million gallons of water per day from the Hooksett Pool section of the Merrimack River for the cooling process in electricity generation. The facility discharges waste heat and other pollutants to the river. Merrimack burns coal in its boilers to generate steam to drive its electrical generating turbines. It also takes water from the Merrimack River through two intake structures and uses the water to condense the steam back to water for cooling so that more steam and electricity can be generated. In the process of condensing steam the river water absorbs the facility's steam turbine waste heat. This water, carrying the facility's waste heat, is then discharged back to the Hookset Pool in a cooling system referred to as open cycle or once-through. It maximizes the amount of water taken from the river for cooling as well as the amount of waste heat discharged to the river.

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Merrimack Station Draft/Final NPDES Permit

Comments Responding to Initial Comments on the Revised Draft Permit 2014

- [CLF, EIP, Earthjustice, and Sierra Club's Comments Responding to Initial Comments on the Draft Permit, October 22, 2014 \(PDF\)](#)
- [Exhibit A – Direct Testimony of Frank T. DiPalma and C. Larry Dalton \(PDF\)](#)
- [Exhibit B – Indianapolis Power & Light Co. NPDES CPCN Petition \(PDF\)](#)
- [Exhibit C – Indianapolis Power & Light Co. NPDES CPCN: Angelique Olinger Testimony Without Attachments \(PDF\)](#)
- [Exhibit D – Indianapolis Power & Light Co. NPDES CPCN: Dennis H. Fink Testimony and Attachments \(PDF\)](#)
- [Public Service of New Hampshire, October 22, 2014](#)

- [Cover Letter \(PDF\)](#)
- [PSNH's October 22, 2014 Response to Comments to EPA's Draft Permit – Redacted \(PDF\)](#)
- [Lowell Regional Wastewater Utility, October 20, 2014 \(PDF\)](#)

Comments Received in Response to the Revised Draft Permit for Merrimack Station 2014

- [Public Service of New Hampshire, August 18, 2014:](#)
 - [Cover Letter \(PDF\)](#)
 - [PSNH's August 18, 2014 Comments to EPA's Draft Permit – Redacted \(PDF\)](#)
 - [Exhibits to PSNH's August 18, 2014 Comments to EPA's Draft Permit – Part 1 \(PDF\)](#)
 - [Exhibits to PSNH's August 18, 2014 Comments to EPA's Draft Permit – Part 2 \(PDF\)](#)
- [Southern Company Comments on the Revised Draft Merrimack Permit August 18, 2014 \(PDF\)](#)
- [CLF, EIP, Sierra Club, Earthjustice et al Comments on Proposed Steam Electric ELGs \(PDF\)](#)
- [Merrimack NPDES Comments, August 18, 2014 \(PDF\)](#)
- [VanBriesen Report \(PDF\)](#)
- [Utility Water Act Group Comments on Revised Draft Permit for the Merrimack Station \(PDF\)](#)
- [Electric Power Research Institute \(EPRI\) Comments on Merrimack Station Revised Draft Permit \(PDF\)](#)
- [Upper Merrimack River Local Advisory Committee Comments \(PDF\)](#)
- [Revised Draft Permit \(PDF\)](#)
- [Revised Draft Permit Fact Sheet \(PDF\)](#)
- [Revised Draft Permit Public Notice \(PDF\)](#)

Comments Received in Response to the Revised Draft Permit for Merrimack Station 2011

- [2011 Draft Permit \(PDF\) \(Note: Corrections on pages 6–7\)](#)
 - [Attachment A – Freshwater Chronic and Modified Acute Toxicity Test Protocol \(PDF\)](#)
 - [Attachment B – Monitoring Location Map \(PDF\)](#)
 - [Part II Standard Condition \(PDF\)](#)
- [2011 Fact Sheet \(PDF\) \(60 pp, 385 K\) \(Note: Corrections on pages 12, 33, and 34\)](#)
 - [Attachment A: Map Location of Merrimack Station \(PDF\)](#)
 - [Attachment B: Map Location of Outfalls \(PDF\)](#)
 - [Attachment C: Merrimack Station Schematic of Water Flow \(PDF\)](#)
 - [Attachment D: Clean Water Act NPDES Permitting Determinations for the Thermal Discharge and Cooling Water Intake Structures at Merrimack Station in Bow, New Hampshire \(PDF\)](#)
 - [Appendix A: Measured Daily Maximum, Minimum and Mean Water Temperature at Monitoring Station N-10, S-0 and S-4 at Merrimack Station \(PDF\)](#)
 - [Attachment E: Determination of Technology-Based Effluent Limits for the Flue Gas Desulfurization Wastewater at Merrimack Station in Bow, New Hampshire \(PDF\)](#)
 - [Attachment F: Discharge Monitoring Report Summary January 2005 – December 2010 \(PDF\)](#)
- [Administrative Record](#)
- [Comments Received During the Public Notice Period for the 2011 Draft Permit](#)
- [Public Hearing](#)

- [Information Brief \(PDF\)](#)
- [Transcript \(PDF\)](#)
- [News Release: Updated Clean Water Discharge Permit for Merrimack Station in Bow, N.H. Issued for Review](#)

Contact Us about the Merrimack Station Draft NPDES Permit

Please use the following form to send us comments or questions. Be sure to include your e-mail address if you'd like a response. For more information about Merrimack Station Draft NPDES Permit, please contact:

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